

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor: ZOLLER, PANU K
Application No.: 11/568376 Confirmation No.: 3508
Filed: 22-MAR-2005 Group Art Unit 1783
Title: ROLL STABILIZED DOUBLE-SIDED PRESSURE SENSITIVE ADHESIVE
TAPE ASSEMBLY

BRIEF ON APPEAL

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December 17, 2010 /Joyce M. Courtney/
Date Signed by: Joyce M. Courtney

Dear Sir:

This is an appeal from the Office Action mailed on July 29, 2010, in light of the Advisory Action mailed 1-3 and 11-16, finally rejecting claims 1-3 and 11-16.

Fees

- ☒ Any required fee under 37 CFR § 41.20(b)(2) will be made at the time of submission via EFS-Web. In the event fees are not or cannot be paid at the time of EFS-Web submission, please charge any fees under 37 CFR § 1.17 which may be required to Deposit Account No. 13-3723.
☐ Please charge any fees under 37 CFR §§ 37 CFR § 41.20(b)(2) and 1.17 which may be required to Deposit Account No. 13-3723.
☒ Please charge any additional fees associated with the prosecution of this application to Deposit Account No. 13-3723. This authorization includes the fee for any necessary extension of time under 37 CFR § 1.136(a). To the extent any such extension should become necessary, it is hereby requested.
☒ Please credit any overpayment to the same deposit account.

A Notice of Appeal in this application was filed on September 8, 2010, and was received in the USPTO on September 8, 2010.

Appellants request the opportunity for a personal appearance before the Board of Appeals to argue the issues of this appeal. The fee for the personal appearance will be timely paid upon receipt of the Examiner's Answer.

REAL PARTY IN INTEREST

The real party in interest is 3M Company (formerly known as Minnesota Mining and Manufacturing Company) of St. Paul, Minnesota and its affiliate 3M Innovative Properties Company of St. Paul, Minnesota.

RELATED APPEALS AND INTERFERENCES

Appellants filed an appeal of a final decision rejecting the claims of U.S. Application No. 10/817,439 ("Roll Stabilizing Release Liner," Zoller) with the Board of Patent Appeals and Interferences (Appeal 2010-008798). A Decision on Appeal affirming the Examiner was mailed October 20, 2010. A Request for Rehearing under 37 CFR 41.52(a)(1) was filed on December 14, 2010. An amended Request for rehearing was also filed on December 14, 2010.

Appellants note that the issues and arguments addressed in the current appeal are closely related to the issues and arguments addressed in Appeal 2010-008798.

Appellants are unaware of any other related appeals or interferences.

STATUS OF CLAIMS

Claims 1-3, 11-18, and 20-26 are pending.

Claims 17, 18, and 20-26 have been withdrawn.

Claims 1-3, 11-18, and 20-26 stand rejected.

Claims 1-3, 11-18, and 20-26 are being appealed.

STATUS OF AMENDMENTS

No amendments have been filed after the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

In the following summary, element number in bold brackets refer to the exemplary embodiment of **FIG. 1**, as described at Page 6, lines 3-23.

Independent claim 1 provides an adhesive tape assembly [20] comprising a double-sided adhesive tape [22] comprising front [24] and back adhesive sides [28], a first release liner [11], and a second release liner [10]. (Page 2, lines 7-11). Each of said adhesive sides comprising a pressure sensitive adhesive, e.g., PSA layers [26] and [30]. (Page 2, lines 9-11.) PSA layers are described at, e.g., Page 11, line 6 – page 12, line 2.

The first release liner [11] has a release side [17] comprising a release material [13] in contact with, bonded to and readily removable from one of said adhesive sides, and a first liner back side [19]. The second release liner [10] has a release side [16] comprising a release material [12] in contact with, bonded to and readily removable from the other of said adhesive sides, and a roll stability side [18] comprising a roll stability material [14]. The roll stability side [18] contacts the back side [19] of the first release liner [11] when the adhesive tape assembly [20] is formed into a roll [32].

The roll stability material [14] comprises an ethylene vinyl acetate (see, e.g. page 7, line 20 – page 8, line 29) and provides a substantial increase in roll stability, when said adhesive tape assembly [20] is formed into a roll [32]. (See, e.g., page 2, lines 22-31.)

Dependent claim 14 depends from claim 1, and further requires the roll stability material [14] comprises an ethylene vinyl acetate having a vinyl acetate content of at least about 5% and less than about 28% by weight. (See, e.g., Page 7, line 20 – page 8, line 5.)

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

I. Claims 1-3 and 11-16 stand rejected under 35 USC § 103(a) as purportedly unpatentable over Johnson et al. (US 5,167,995) individually or in view of Zoller et al. (US 6,365,254).

ARGUMENT

I. Claims 1-3 and 11-16 stand rejected under 35 USC § 103(a) as purportedly unpatentable over Johnson et al. (US 5,167,995) individually or in view of Zoller et al. (US 6,365,254).

A. Claims 1-3, 11-13, 15 and 16.

Claims 2-3, 11-13, 15 and 16 will stand or fall with independent claim 1, from which they depend.

1. The Examiner has failed to provide any rational basis for modifying the references.

Independent claim 1 requires, in part, an adhesive tape assembly comprising a first release liner and a second release liner. The second release liner comprises a roll stability side comprising a roll stability material which contacts the back side of the first release liner when the adhesive tape assembly is formed into a roll. The roll stability material comprises an ethylene vinyl acetate and provides a substantial increase in roll stability, when the adhesive tape assembly is formed into a roll.

The Examiner has admitted that Johnson fails to describe an adhesive article comprising two such release liners, but correctly notes that the use of two release liners is generally known. However, the Examiner has failed to show that Johnson, Zoller, or any other source describes an problem that arises when two release liners are used, nonetheless, the use of a roll stability layer when two release liners are brought into contact when an adhesive article is wound into a roll.

The Examiner is correct that Johnson and Zoller each describe a single-linered adhesive article, where the single liner has a friction enhancing layer said to be suitable for use against a heat activated adhesive. However, from this, the Examiner improperly concludes that "It would have been obvious to one of ordinary skill in the art to include a friction enhancing layer on one of the support sheets of the release liners for forming a roll of the double-sided PSA tape, motivated by the desire to obtain the enhanced roll stability taught by Johnson." Clearly, if Johnson fails to describe a double-linered adhesive article, Johnson also fails to describe any potential problems, such a roll stability, that might arise in such a construction

The Examiner's conclusory statements notwithstanding, the Examiner has failed to establish that one of ordinary skill in the art would have recognized any need to enhance the friction between release liners. In addition, the Examiner has failed to establish that one of ordinary skill in the art would consider the teachings of Johnson or Zoller - each directed to

enhancing the friction between a release liner and a heat activated adhesive - when trying to solve the unrelated problem of providing roll stability when two release liners are in contact.

In summary, absent the hindsight obtained from Appellants' disclosure, the Examiner has failed to show (1) why one of ordinary skill in the art would either recognize the need for a roll stability layer between two release layers wound into contact with each other or (2) why one of ordinary skill in the art would consider the teachings of Johnson or Zoller, which are directed to roll stability layers between a liner and a heat-activated adhesive, when trying to address this problem.

2. The Examiner's prior responses to this argument are without merit.

In the Final Office Action, the Examiner referred to page 7 of Appellants' response to the First Office Action stating:

Applicant argues at page 7:

"the Examiner acknowledges that Johnson et al. do not disclose the use of two liners. Thus, one of ordinary skill in the art would readily recognize that, when wound into a roll, the pressure sensitive adhesive and the back side of the support sheet of the first (and only) liner would be contact. As Johnson et al. requires a face layer between the adhesive and the support sheet on the first side, one of ordinary skill in the art would see no need for a friction enhancing layer on the backside of the support sheet when it to contacts a pressure sensitive adhesive."

However, rather than addressing whether and why Johnson would inform one of ordinary skill of the need for a friction enhancing layer, the Examiner merely repeated his argument in support of including two release liners, i.e.,

However, the Official notice "placing two release liners on both sides of a double-sided PSA tape is common and well known" relates to an embodiment having two release liners.

Applicant's argument is misplaced.

Actually, it is the Examiner's argument that is misplaced. Appellants and the Examiner agree that the use of two release liners is generally known; however, they also agree that Johnson fails to describe such a construction. Merely repeating that the use of two release liners is known is irrelevant to whether Johnson or any other source describes the need for roll stability layer in such a construction.

In the Final Office Action, the Examiner refers to pages 7 and 8 of Appellants' response to the First Office Action correctly noting Appellants' argument that:

- "a. The Examiner has failed to identify what this purported "beneficial effect" is.
- b. If the "purported benefit" is to enhance friction, the Examiner has failed to show how Johnson et al. or any other source describes, teaches or suggests the need for this particular beneficial effect in a tape application having two release liners wound against each other, as required by the present claims."

However, rather than addressing the failure of Johnson to describe the need for friction enhancing agent between two release liners, the Examiner merely repeats the argument that Johnson teaches a friction enhancing layer stating:

However, since Johnson teaches tackifiers is friction enhancing agent, it would have been an obvious modification to one of ordinary skill in the art to form a friction enhancing layer comprising mixtures of EVA/tackifiers to provide roll stability between the two release liners in a roll of double-sided PSA tape, and the structure of the double-sided PSA tape has been rendered obvious by the Official notice set forth above.

Appellants submit that this assertion by the Examiner amounts to no more than a conclusory statement lacking the necessary rational underpinning to support the legal conclusion of obviousness. (See, KSR, 550 U.S. at 1, 82 USPQ2d at 1396 (quoting In re Kahn 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).) The Examiner provided no evidence or arguments to support the assertion that a friction enhancing agent would be required between two liners or the assertion that one of ordinary skill in the art would apply the teachings of Johnson to this problem, nonetheless that they would have any reasonable expectation of success.

In summary, the Examiner has failed to address critical elements of a proper rejection under 35 USC § 103. For example, absent the hindsight gained from Appellants' specification,

- (1) what is the teaching, suggestion, or motivation from the cited references or any other source for modifying the references as suggested by the Examiner; and
- (2) what is the basis for a reasonable expectation of success when applying the teachings of a friction enhancing layer for use between a liner and a heat-activated adhesive to the separate problem of a roll stability layer between two release liners?

3. *The Examiner's reliance on the purported equivalency of EAA and EVA is contrary to Federal Circuit Precedent as set forth by In Re Ruff.*

In the Final Office Action, the Examiner refers to page 8 of Appellants' response to the First Office Action correctly noting Appellants' argument that:

"Applicants note that the Examiner's assertion that EVA and EAA are functionally equivalent is based solely on the fact that both items appear in Markush-type group listing representative materials suitable for face layer (14). However, relying in this basis is clearly contrary to controlling law. (See, e.g., MPEP § 2144.06 citing *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958) ("The mere fact that components are claimed as members of a Markush group **cannot** be relied upon to establish the equivalency of these components.")")

In response, the Examiner argued:

However, nowhere has the examiner stated that EAA and EVA are "equivalent". The basis of rejection is these polymers are "functionally equivalent" materials which imparting desired surface tension adhesion and release characteristics. One of ordinary skill in the art would have reasonably expected that they can be similarly modified by friction enhancing agent tackifiers for forming mixtures for use as friction enhancing layers.

Appellants discern no meaningful distinction between the terms "equivalent" and "functionally equivalent" in the context of the present argument. For example, in the First Office Action, the Examiner appears to use the terms interchangeably, stating:

Finally, Johnson is silent about making a friction enhancing agent by mixing ethylene vinyl acetate (EVA) and tackifiers. However, since Johnson teaches that EVA and EAA are functionally equivalent base materials for imparting desired surface tension adhesion and release characteristics, it would have been obvious to one of ordinary skill in the art to substitute EAA with EVA to make the mixture of friction enhancing agent, because the selection of a known equivalent material based on its suitability for its intended use supported a prima facie obviousness determination. See MPEP § 2144.07.

Regardless of any distinction between these terms; however, controlling legal authority still holds that "it is no longer possible to indulge in a presumption that the members of a Markush group are recognized by anyone to be equivalents except as they 'possess at least one

property in common which is mainly responsible for their function in the claimed relationship.” (*In re Ruff*, 256 F.2d 590, 599 (CCPA 1958) (citing the 1953 revision of section 706.03(y) of the Manual of Patent Examining Procedure).) Despite such a clear expression of binding authority, the Examiner has consistently relied on the mere fact that EAA and EVA are both listed in the same Markush-type group as release materials to assert that they functional equivalents for use as a base material for a friction enhancing agent located between two release liners.

The Examiner has acknowledged that Johnson merely teaches that “The face layer imparts desired surface tension adhesion and release characteristics with respect to pressure sensitive adhesives,” (Final Office Action, page 3, emphasis added.) This assertion is supported by the Examiner with reference to col. 3, lines 65-67 of Johnson which states: “Face layer 14 imparts to release liner 10 desired surface adhesion and release characteristics with regard to adhesive coatings to which the liner is to be applied.” (Emphasis added.)

Thus, consistent with *In re Ruff*, at best one can conclude that EVA and EAA “possess at least one property in common which is mainly responsible for their function” in providing the desired surface adhesion and release characteristic with regard to adhesive coatings. Clearly, the Examiner’s attempt to extend the “functional equivalence” beyond these narrow permissible boundaries and assert that they are also equivalent when creating a friction enhancing layer between two non-adhesive coatings is contrary to controlling authority and cannot be sustained.

4. The Examiner’s reliance on the secondary reference (Zoller) fails to overcome the deficiencies of the primary reference.

Although Zoller describes a layer comprising EVA, the Examiner has failed to show how Zoller describes, teaches, or suggests the use of such a roll stability layer between two release liners. Like Johnson, Zoller is directed to the problem of providing a roll stability layer between a single release liner and a heat-activated adhesive. For at least the reasons discussed above, the Examiner has failed to provide the required legal rationale for extending those teachings to construction of the present claims. Rather, the Examiner has relied on mere conclusory statements – an approach forbidden by controlling law. (See, e.g., KSR.)

For at least these reasons, Appellants assert that the rejection of claim 1 under 35 USC § 103(a) is contrary to controlling authority and should be reversed. Similarly, the rejection of dependent claims 2-13, 15 and 16 should also be reversed.

B. Claim 14

Claim 14 depends from claim 1 and further requires that roll stability material comprise an ethylene vinyl acetate having a vinyl acetate content of at least about 5% and less than about 28% by weight. The Examiner's sole argument for the obviousness of claim 14 is that:

For claims 12 and 14, since Johnson teaches that the face layer 14 typically comprises and may consist essentially of one or more of the following: a copolymer of ethylene and at least one polar comonomer, such as acrylic acid (EVA), vinyl acetate (EAA), etc., the comonomer is a result effective modifier, so as to provide desired surface tension adhesion and release characteristics. Workable amount of modifier monomer is deemed to be an obvious routine optimization to one of ordinary skill in the art, motivated by the desire to obtain the beneficial effects.

However, according to Federal Circuit Law, "A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. (*In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). (See MPEP § 2144.05 (II) (B).))

Here, the Examiner has failed to show that one of ordinary skill in the art would recognize that varying the amount of a comonomer (e.g., vinyl acetate) would affect "surface tension adhesion and release characteristics." Also, as expressly stated in Johnson, and as acknowledged by the Examiner, Johnson merely describes providing the desired surface tension adhesion and release characteristics with respect to an adhesive surface. The Examiner has failed to articulate any basis for presuming one of ordinary skill in the art would recognize any results effective property of the vinyl acetate content when trying to provide a roll stability layer between two non-adhesive substrates (e.g., release liners).

The influence of vinyl acetate content and its effects on a variety of factor important to its function as a roll stability layer in the constructions of the present claims were identified by the present inventors and are described in the present specification. For example, the need for at least about 5% by weight vinyl acetate to achieve a desired coefficient of friction is described at page 7, lines 28 – page 8, line 2. The need to have a vinyl acetate content of less than about 28

weight % to prevent blocking is described at page 7, lines 20-28. Appellants respectfully submit that the Examiner has failed to show that, absent the teachings of the present inventors, one of ordinary skill in the art recognized that EVA could be used as a roll stability layer between two release materials, nonetheless that the vinyl acetate content was a results effective variable to be adjusted for the purpose of providing a roll stability layer between two release layers.

For at least these reasons, Appellants assert that the rejection of claim 14 under 35 USC § 103(a) is contrary to controlling authority and should be reversed.

CONCLUSION

For at least the foregoing reasons, Appellants respectfully submit that the Examiner has erred in rejecting this application. In particular, as the Examiner's rejections fail to meet the minimum requirements to establish a *prima facie* of obviousness and are contrary to controlling legal authority, they cannot be sustained. Please reverse the Examiner on all counts.

Respectfully submitted,

December 16, 2010

Date

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CLAIMS APPENDIX

1. (Original) An adhesive tape assembly comprising:

a double-sided adhesive tape comprising front and back adhesive sides, each of said adhesive sides comprising a pressure sensitive adhesive; and

a first release liner having a release side comprising a release material in contact with, bonded to and readily removable from one of said adhesive sides, and a first liner back side; and

a second release liner having a release side comprising a release material in contact with, bonded to and readily removable from the other of said adhesive sides, and a roll stability side comprising a roll stability material which contacts the back side of said first release liner when said adhesive tape assembly is formed into a roll, said roll stability material comprising an ethylene vinyl acetate and providing a substantial increase in roll stability, when said adhesive tape assembly is formed into a roll.

2. (Original) The adhesive tape assembly as set forth in claim 1, further comprising a tab bonded to at least one of said first liner back side and said roll stability side, each said tab being operatively adapted to facilitate removal of one said release liner from said adhesive tape by pulling on said tab.

3. (Original) The adhesive tape assembly as set forth in claim 2, wherein said tab is heat bonded to said first liner back side, with said first liner back side comprising at least one of a polyethylene, polypropylene, polyester, thermoplastic polyolefin, copolymer of polyethylene and polypropylene, and combinations thereof, and said tab comprising at least one of a polyamide, polyethylene, polyester, thermoplastic polyolefin, copolymer of polyethylene and polypropylene, and combinations thereof.

4 - 10 (Cancelled)

11. (Original) The adhesive tape assembly as set forth in claim 1, wherein said second release liner further comprises at least one intermediate layer disposed between said release material and said roll stability material, said intermediate layer comprising at least one of a

medium density polyethylene and a low density polyethylene, with said intermediate layer of low density polyethylene being disposed between said release material and said intermediate layer of medium density polyethylene, and with said intermediate layer of medium density polyethylene being disposed between said roll stability material and said intermediate layer of low density polyethylene.

12. (Original) The adhesive tape assembly as set forth in claim 1, wherein said ethylene vinyl acetate has a sufficiently low vinyl acetate content that said roll stability side does not block with said back side of said first release liner.

13. (Original) The adhesive tape assembly as set forth in claim 12, wherein the back side of said first release liner comprises at least one of a high density polyethylene, a medium density polyethylene, a low density polyethylene, a linear low density polyethylene and an ultra-low density polyethylene.

14. (Original) The adhesive tape assembly as set forth in claim 1, wherein said roll stability material comprises an ethylene vinyl acetate having a vinyl acetate content of at least about 5% and less than about 28% by weight.

15. (Previously Presented) The adhesive tape assembly as set forth in claim 1, wherein said roll stability layer further comprises up to about 5% by weight of an anti-blocking agent based on the amount of ethylene vinyl acetate present.

16. (Original) The adhesive tape assembly as set forth in claim 1, wherein said adhesive tape assembly has a width and is wound into a roll, with said roll stability side contacting said first liner back side, and said roll has an outer circumferential edge, a diameter that is at least about 20 times said width and does not fall apart when held suspended along said outer circumferential edge.

17. (Withdrawn) A method of otherwise applying a double-sided pressure sensitive adhesive tape to one or more surfaces, said method comprising:

providing the adhesive tape assembly as set forth according to claim 1;

removing one of the release liners from one or more lengths of the adhesive tape assembly so as to expose the pressure sensitive adhesive of an adhesive side of each length of the adhesive tape assembly; and

applying the exposed pressure sensitive adhesive of the adhesive side of each length of the adhesive tape assembly to a first surface.

18. (Withdrawn) The method as set forth in claim 17, wherein said providing comprises providing a roll of the adhesive tape assembly, and said method further comprises:

unwinding the roll; and

separating the adhesive tape assembly into discrete lengths, with each discrete length having a length and a width suitable for adhering a component onto part of a vehicle.

19. (Cancelled)

20. (Withdrawn) The method as set forth in claim 17, further comprising:

removing the remaining release liner on the one or more lengths of the adhesive tape assembly so as to expose the other adhesive side of each length of the adhesive tape assembly; and

applying the exposed pressure sensitive adhesive of the other adhesive side of each length of the adhesive tape assembly to a second surface,

wherein the adhesive tape is applied between the first surface and second surface.

21. (Withdrawn) The method as set forth in claim 17, further comprising:

bonding a tab to at least one of the first liner back side and the roll stability side of one or more lengths of the adhesive tape assembly.

22. (Withdrawn) The method as set forth in claim 21, wherein said bonding occurs after said removing, and the tab is bonded to the remaining release liner on the one or more lengths of the adhesive tape assembly.

23. (Withdrawn) The method as set forth in claim 21, wherein said bonding comprises bonding a tab to the back side of the first release liner, and said removing comprises removing the second release liner.

24. (Withdrawn) The method as set forth in claim 23, wherein said bonding further comprises bonding another tab to the roll stability side of the second releases liner, and said removing comprises pulling the other tab to remove the second release liner.

25. (Withdrawn) The method as set forth in claim 21, wherein said bonding comprises bonding a tab to the roll stability side of the second release liner, and said removing comprises removing the second release liner by pulling on the tab.

26. (Withdrawn) The method as set forth in claim 21, further comprising:
removing the remaining release liner on the one or more lengths of the adhesive tape assembly by pulling on the tab, so as to expose the other adhesive side of each length of the adhesive tape assembly; and

applying the exposed pressure sensitive adhesive of the other adhesive side of each length of the adhesive tape assembly to a second surface,

wherein the adhesive tape is applied between the first surface and second surface.

27 - 28. (Canceled)

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

With respect to Appeal 2010-008798; the following documents are enclosed with this Appeal Brief.

- (1) Brief on Appeal dated 12-Mar-2009
- (2) Examiner's Answer dated 13-May-2009
- (3) Decision on Appeal dated 20-Oct-2010
- (4) Request for Rehearing dated 14-Dec-2010
- (5) Amended Request for Rehearing dated 14-Dec-2010

Appellants note that some of the issues and arguments presented in the current appeal are closely related to issues and arguments presented in Appeal 2010-008798.